



# 53D Wing Safety

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## 101 Critical Days of Summer



### *Boating and Water Skiing*

**SAFETY...It's  
an ATTITUDE**





# Boatin g





# Boating Mishap Factors



A review of boating accidents shows a variety of factors are involved in the typical mishap.

- Improper weight distribution, overloading, inattention to weather conditions and improper lookout are the chief causes of accidents.
- Hanging over the side and riding on the bow, combined with unexpected turns, lead to falls overboard.



# Alcohol

- Alcohol and boating accidents go hand in hand. Alcohol lessens alertness and the sense of balance that is crucial to accident free boating. This can occur with as little as one or two drinks. The U.S. Coast Guard reports alcohol involvement in serious boating accidents.





# EXAMPLES



- A father took his six year old son fishing with him in his 17' bass boat. The child lost his balance and fell overboard. The father attempted to rescue his son but both drowned. Life jackets were available but not worn.





# EXAMPLES



- Three friends drowned during a fishing trip when their 15 foot boat was swamped by waves from an unexpected storm. Seven people were in the rented boat.



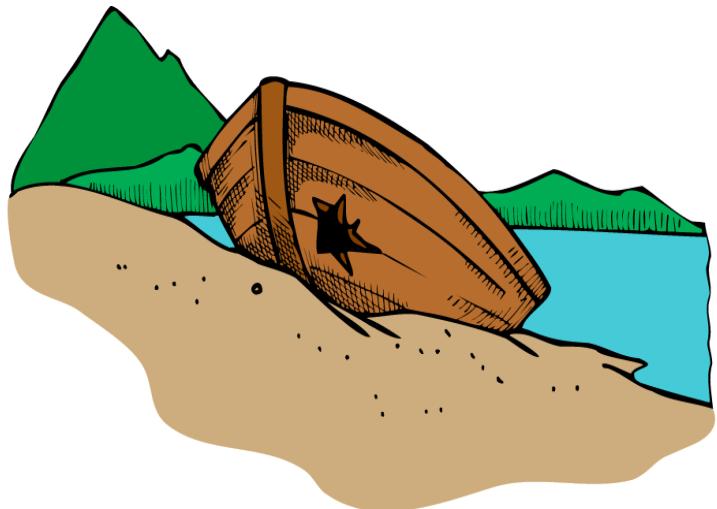
The boat's capacity plate indicated a maximum safe occupancy of six persons.



# EXAMPLES

- Two young men were returning at night from a fishing trip in a 14 foot motor boat when they collided with another boat. Both boats were operated at night without lights. Both men were thrown out of the boat.

One drowned and the other received hip injuries. Personal floatation devices were aboard the boat but not





# Boating



- Boating is growing as a pastime and enjoyed by many. The increase in the number of people boating is an increase in the number of mishaps.
- The majority of accidents would not have happened if the victims had taken time to learn proper small boat operating procedures.
- If small boat enthusiasts observe the following rules, they will be nautical miles ahead in personal fun and safety.



# Boating Safety Rules



If small boat enthusiasts observe the following rules, they will be nautical miles ahead in personal fun and safety.

- Know your boat - what it can and can't do.
- Don't overload - check the boat manufacturer's capacity plate.
- Keep a good lookout and situational awareness of other boats and objects.
- Operate at safe and legal speeds - watch your wake.



# Boating Safety Rules



- Know and respect the weather - heed warnings.
- Take sufficient fuel - in proper containers - know your cruising radius.
- Take necessary equipment fire extinguishers, personal flotation devices.
- Secure the boat; properly stow loose objects.





# Weather Changes



There are indicators that you can look for that indicate an approaching weather change:

- Weather changes generally come from the west so scan the sky with your weather eye, especially to the west.
- A sudden drop in temperature and change in the wind often mean that a storm is near.
- If you have a barometer on your boat check it every two to three hours. A rapid drop in pressure means a storm is approaching.
- Watch for cloud build up, especially rapid vertically rising clouds.



# Weather Changes



- **IF A STORM IS NEAR...**
- Reduce speed and proceed with caution.
- Put on PFDs.
- Close all hatches and ports.
- Head for the nearest shore that is safe to approach and duck into the lee of land.
- Put the bow into the wind and waves at about a 40 degree angle and watch for floating debris.
- Pump out bilges and keep dry.
- Change to a full fuel tank.
- Secure loose items which could be tossed about.
- Keep everyone low in the boat and near the centerline.





# Boating Safety Rules



- Learn boating laws and obey them.  
They may vary from state to state.
- Keep your  
boat  
shipshape;  
check  
equipment.





# Boating and Alcohol



- Never operate a boat while intoxicated.
- Drinking Afloat More Dangerous Than Driving.



Research has shown that as little as four hours' exposure to sun, wind, glare, vibration, and other motion on the water produces "boater's hypnosis," a kind of fatigue that slows reaction time almost as



# Boating and Alcohol



Alcohol can affect your judgment, motor skills, peripheral vision, depth perception, night vision, and balance. A "tipsy" person on an unstable, moving platform like a boat runs the risk of slipping on deck, stumbling down a gangway, or falling overboard. In the event of a fall overboard, alcohol may increase risk of cardiac arrest and will certainly reduce your body's ability to stay warm in cold water. It is a well-established fact that with the very first drink, brain functions are depressed. That's why boaters should think before they drink.



# RECOMMENDATIONS



- Take a safe boating course. The local Coast Guard Auxiliary can provide the information necessary to enroll.
- Do a pre-season inspection of your boat, motor, and safety accessories and check them each time you go out.



# RECOMMENDATIO NS



- Install a dead-man ignition switch on the motor.
- Abide by the manufacturer's load capacity plate on the boat. It lists limits for people, motor and gear. Don't overload.
- Make sure the required safety equipment (personal flotation devices, fire extinguisher, whistle, horn, flares, etc.,) is





# RECOMMENDATIO NS



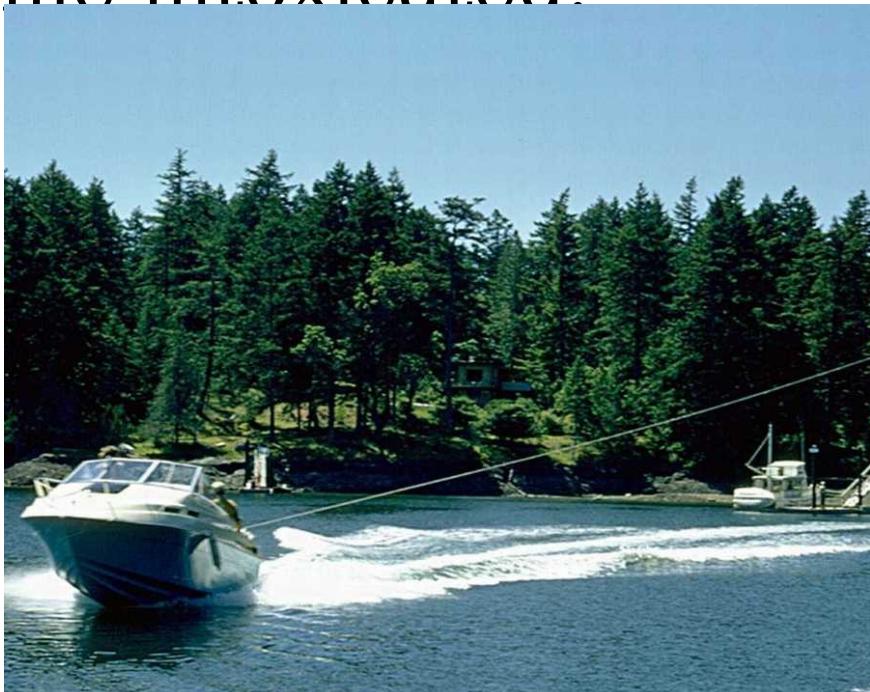
- A VHF radio is recommended as well as an anchor and line.
- Always leave a float plan with a friend or marina operator. Indicate where you are going, departure time, boat name, registration number, and what time to notify the Coast Guard if you have not returned.



# RECOMMENDATIO NS



- Do not drink while operating a boat. Discourage passengers from drinking too. Most states have stiff penalties, similar to those imposed on motor vehicles operators, for operating a boat while intoxicated.
- When passing marinas, fishing areas, or swimming areas reduce speed to





# RECOMMENDATIO NS



Be aware of any and all of the following:

- Hazardous Inlets
- Shoaling areas
- Whitewater areas
- Dams
- Locks
- Abnormal tides or currents



# Safe Boating Tips



## Important tips for safe boating fun!

- When launching a boat, always back the boat into the water. Pulling the boat into the water can really mess up your carburetor.
- When water-skiing, never allow a feisty duck to hitch a ride on your skis.
- Always stay at least five boat-lengths behind the whale in front of you.
- While sinking to the bottom of a lake or ocean, screaming does not help.
- When boating, always wear a swimsuit with suspenders. This makes it easier on the guys with the grappling hook when they're trying to retrieve your body.
- Drowning can cause severe shortness of breath. And you don't even want to think about what it does to your complexion.
- Always wear a life jacket in case you fall overboard. Also, it's a good idea to take along something to read, in case a whale swallows you. Most whales seem to enjoy Moby Dick.
- Boating while intoxicated is not illegal in some states, but it's stupid in all of them.



# Towing Your Boat



- Rollers and bolsters must be kept in good condition to prevent scratching and gouging of the hull.
- Tie-downs and lower unit supports must be adjusted properly to prevent the boat from bouncing on the trailer. The bow eye on the boat should be secured with a rope, chain or turnbuckle in addition to the winch cable. Additional straps may be required across the beam of the boat.



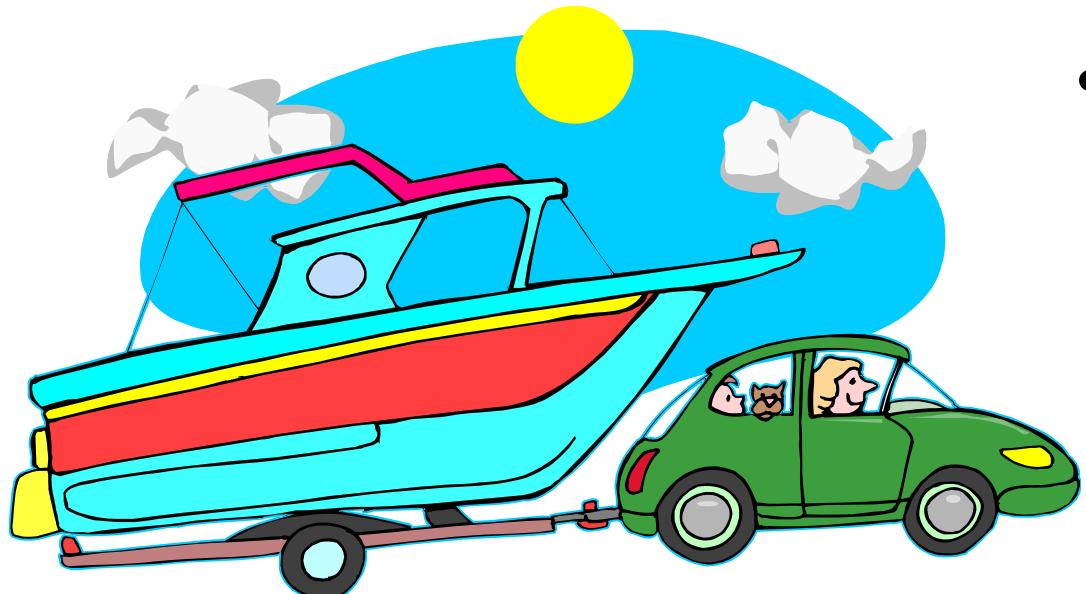
# Towing Your Boat



- **SAFETY TIPS FOR TOWING YOUR BOAT**
- Choose the proper trailer for your boat. More damage can be done to a boat by the stresses of road travel than by normal operation. A boat hull is designed to be supported evenly by water. When transported on a trailer, your boat should be supported structurally as evenly across the hull as possible. This will allow for even distribution of the weight of the hull, engine and equipment. It should be long enough to support the whole length of the hull but short enough to allow the lower unit of the boat's engine to extend freely.



# Towing Your Boat



- The capacity of the trailer should be greater than the combined weight of the boat, motor, and equipment.

The tow vehicle must be capable of handling the weight of the trailer, boat, equipment, as well as the weight of the passengers and equipment that will be carried inside.



# Towing Your Boat



This may require that the tow vehicle may need to be specially equipped with these:

- Engine of adequate power.
- Transmission designed for towing.
- Larger cooling systems for the engine and transmission.
- Heavy duty brakes.
- Load bearing hitch attached to the frame, not the bumper. (Check your vehicle owner's manual for specific information.)



# Towing Your Boat



**Check Before You Go Out On The Highway. Be sure:**

- The tow ball and coupler are the same size and bolts with washers are tightly secured. (Vibrations of road travel can loosen them.)
- The coupler is completely over the ball and the latching mechanism is locked.
- The trailer is loaded evenly from front to rear as well as side to side.



# Towing Your Boat



- Too much weight on the hitch will cause the rear wheels to drag, making steering more difficult.
- Too much weight on the rear of the trailer will cause the trailer to "fishtail" and may reduce traction or even lift the rear wheels of the tow vehicle off the ground.
- The safety chains are attached crisscrossing under the coupler to the frame of the tow vehicle. If the ball were to break, the trailer would follow in a straight line and prevent the coupler from dragging on the road.



# Towing Your Boat



- The lights on the trailer function properly.
- Check the brakes. On a level parking area roll forward and apply the brakes several times at increasing speeds to determine a safe stopping distance.
- The side view mirrors are large enough to provide an unobstructed rear view on both sides of the vehicle.



# Towing Your Boat



- Check tires (including spare) and wheel bearings. Improper inflation may cause difficulty in steering. When trailer wheels are immersed in water (especially salt water), the bearings should be inspected and greased after each use.
- Make certain water from rain or cleaning has been removed from the boat. Water weighs approximately four pounds per gallon and can add weight that will shift with the movement of the trailer.



# Towing Your Boat



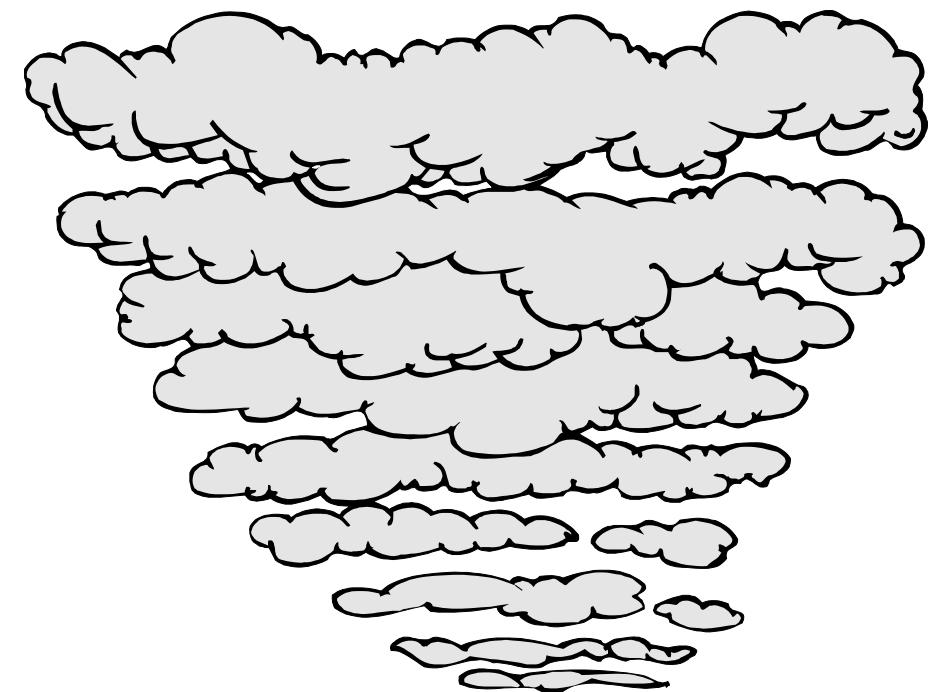
- **Towing Precautions:**
- Allow more time to brake, accelerate, pass, and stop.
- Remember the turning radius is also much greater; curbs and roadside barriers must be given a wide berth when negotiating corners.
- Prior to operating on the open road, practice turning, backing up, etc. on a level uncongested parking area.



# Towing Your Boat



Before you leave for the lake, there are a few things you need to do to ensure that things run smoothly when you get there.



- The first thing you should do is check the weather forecast. Make sure there are no storms in the area that could produce



# Towing Your Boat



Next, take a good look at your boat while it is on the trailer. Visually inspect the boat for damage from any previous use.

Ensure the trailer is in good condition to include the tires and lights. Don't forget about the spare tire also.

Make sure you have enough Coast Guard approved life jackets for everyone that will be in your boat and that they are in good condition.



# Towing Your Boat



- And finally, check all your safety equipment to include a fire extinguisher, radio, lights for operating at night, and a whistle or horn to

signal if you  
need help.





# Boating



After you arrive at the lake, there are a few “rules of the road” to keep in mind while on the water. The most important thing is to be aware of your surroundings.

- Know where other boats are and where you are.
- Keep an eye out for fallen skiers and people that are swimming.
- If you are going to swim, make sure you are out of the normal boating areas to avoid being hit by other boats, never swim alone, don't dive into unfamiliar water, and wear a life jacket.



# Boating



If you will ski, it takes at least three people:

- The operator whose job is to drive the boat,
- A spotter whose job is to watch the skier, letting the operator know when he or she has fallen,
- The skier whose only job is to wear a life jacket and hold on for dear life.





# Boating



- Finally, bring sun block to prevent sunburn and always remember that alcohol and water don't mix. Alcohol is one of the leading causes of water related fatalities and it is also illegal to operate a boat while intoxicated.





# Water Skiing



# Water Skiing



There are rules for recreational activities such as skiing. Remember these simple rules when in tow:  
**ALWAYS** wear a personal floatation device.

- Have someone other than the driver of the boat act as a spotter. The driver should watch the lake, not the skier.
- Maintain a reasonable, safe speed at all times and keep an alert eye open for





# Water Skiing



- If "dropping a ski," be sure to release it near a dock where it can be retrieved immediately out of the way of other boats and skiers.
- Steer clear of docks and away from boats and people who are fishing. Besides being dangerous, people seldom appreciate the wake caused by passing so closely.



# Water Skiing



## The Skier

- Be alert for cross-wakes, partially submerged objects, swimmers, rafters, or anything that might come between you and the boat.
- It is highly recommended that you wear a Coast Guard-approved personal floatation device ([PFD](#)) designed for water-skiing at all times. It will allow you to rest in the water while waiting for the boat, it protects the rib cage and cushions falls, and its bright color will help others in the area to spot you. Ski belts are not Cost Guard-approved and do not offer positive protection to a fallen or unconscious skier.



# Water Skiing



## The Boat Operator

- Before pulling up the skier, double check the path ahead for obstacles and make sure the towline is not caught in the propeller or wrapped around the skier. Never accelerate until the skier is holding the towline handle, with the ski tip or tips showing above water and in front, and signals "hit it".
- It is important for skiers to have a smooth acceleration as they come up on a plane. As the operator, you should ease the throttle at first with a slight increase in speed.



# Water Skiing



- Never attempt sharp turns with the boat, especially if the skier is cutting sharply outside the wake on either side. If an approaching obstacle forces you into an unexpected turn, throttle back as you turn.
- Signal the turn to the skier, remembering that it is better to dunk the skier than risk an accident.



# Water Skiing



- When a skier falls, return without delay. Other boaters may not easily see a skier in the water, and the presence of the tow boat may keep other boaters away from the general area. Since a large percentage of serious water-ski injury accidents are a result of improper operation by the driver during skier pickup, approach with caution from the driver's side so the skier is always in view and on your side of the boat.
- **NEVER** back the boat up to a person in the water.



# Water Skiing



- **The engine should be shut off when you are near the skier so there is no danger from the propeller.**
- Remember, when boat engines idle, even in neutral, the propeller may still turn and injure the unwary skier or entangle and cut the towlines. If a skier falls and is injured, it is wise to proceed with caution. Any injury may be aggravated by pulling the person aboard. Get into the water to support the skier until the nature of the injury is known.
- The rules of the road do not provide any special privileges for vessels towing skiers.



# Water Skiing



## The Observer

- In addition to relaying the skier's and operator's signals, the observer is responsible for watching the skier at all times. Having an observer on board allows the driver to give full attention to the variety of tasks necessary for safe motorboat operation. Statewide boating accident statistics indicate an alarming increase in water-ski accidents resulting from improper lookout.



# Water Skiing



## Speed Limits

- The boat operator should judge the speed according
- to the skier's ability. A good speed for beginners,
- depending on weight and ski size, is 18-25 miles per
- hour. Boat speeds are limited by law under certain
- conditions. The maximum speed for boats is five miles per hour within 100 feet of a swimmer, and within 200 feet of a bathing beach frequented by swimmers, a swimming float, a diving platform or life line, or a passenger landing in use. Boats towing skiers must follow all speed limits.



# Water Skiing



## Your Equipment

- Foot bindings should be secure and free of sharp or protruding surfaces.
- Skis made of wood should be free of splinters or cracks in lamination.
- Check your towline (handles, lines, and connecting hooks) for strength every season. Attach towlines only to proper fittings on the boat. Many skiers have been seriously injured in accidents with the tow boat or ski equipment. A moving towline can cut like a knife. For this reason, towlines should be of equal length when more than one person is skiing.



# Water Skiing

## Where to Ski



- Minimize the danger of collisions with other boats, other skiers, or fixed objects by staying out of congested areas and well-traveled traffic lanes.
- Avoid skiing close to shore, around bends or in shallow water.
- Stay out of fishing areas. It is best to "scout" your area before you ski.